FINDING OF NO SIGNIFICANT IMPACT Road Resurfacing, Restoration, and Rehabilitation, Canyon Junction to Fishing Bridge Junction 07/02/02

YELLOWSTONE NATIONAL PARK IDAHO/MONTANA/WYOMING

MANAGEMENT RECOMMENDATIONS AND APPROVAL		
Recommended:		
	Superintendent Yellowstone National Park	Date
Approved:		
-	Regional Director Intermountain Region	Date

FINDING OF NO SIGNIFICANT IMPACT

Road Resurfacing, Restoration, and Rehabilitation, Canyon Junction to Fishing Bridge Junction

YELLOWSTONE NATIONAL PARK IDAHO/MONTANA/WYOMING

In accordance with the provisions of the National Environmental Policy Act of 1969 and the regulations of the Council on Environmental Quality, 40 CFR 1508.9, the National Park Service prepared an Environmental Assessment: *Road Resurfacing, Restoration, and Rehabilitation, Canyon Junction to Fishing Bridge Junction.* The project is one of many phases of road refurbishment identified in Yellowstone National Park's *Parkwide Road Improvement Plan* (approved June 1992). Resurfacing, restoration, and rehabilitation, of the road are necessary to correct road deterioration and numerous safety hazards. An Environmental Assessment (EA) was released to the public in September 2001. Two alternatives were considered, a no action alternative and the preferred alternative.

PRFERRED ALTERNATIVE

The proposal (Alternative A, preferred alternative) is to resurface, restore, and rehabilitate 25.3 kilometers (15.7 miles) of the Grand Loop Road between Canyon Junction and Fishing Bridge Junction to its existing 7.4 meters (24 foot) paved top width. The existing alignment would be followed. The existing pavement would be milled and placed back on the roadway as base material. A new 75-mm (three-inch) layer of asphaltic concrete would then be laid down. Where the base material is saturated and /or inferior, it would be dug out and replaced with suitable material. If needed, drains would be installed to keep the new base rock dry. Ditches would be cleaned, as needed, to reestablish the original grade for proper and efficient ditch function. Culverts would be cleaned as needed, and one would be replaced. Most disturbance would be in the existing roadway (ditch to ditch). Existing pullout areas would be obliterated, paved, overlaid, or reconstructed. Three new pullouts will be constructed. Where pullouts are obliterated or modified, the area would be rehabilitated to natural conditions.

The base structure will be repaired in 38 locations by excavation of poor-quality material and replacement with better draining aggregate. The excavation will be only as wide as the existing road prism, and about one-meter (three feet) deep. A total of about 17,000 cubic meters of material will be removed, most of which will be disposed of at the Canyon ballfield disposal site or the Lake transfer station disposal site. In some locations perforated drainage pipes will be installed with an outlet ditch to keep the road base material as dry as possible.

The longest digout will be in the vicinity of the Buffalo Ford/Nez Perce Ford Picnic area intersection, and will be about 175 meters (575 feet) long. Work in this area will include the installation of perforated pipe, directly on the west side of the road, in the present ditch. The road grade in this section will be raised approximately 0.3 meters (one-foot) to allow for placement of the increased base material necessary to cross this saturated area, and prevent frost heaving during cold weather. Additionally, the road design dictates that the road shift approximately 0.6 to 0.9 meters (two to three feet) to the east to accommodate these construction parameters in this area. The shift in roadway surface will be accomplished without subsurface excavation of the new road surface area. Road base material will be placed on top of the existing surface of the road edge.

Roadside ditches will be cleaned and reshaped at nine locations totaling about 660 linear meters (2,165 feet). Care will be taken to identify and avoid areas where this work will disturb wetlands, rare plants, historic and prehistoric archaeologically significant resource areas. Ditches will be reshaped and grades will be reestablished to allow proper drainage functions.

Cleaning of 31 culverts will occur, no headwall will be replaced. One masonry headwall will be reconstructed using the existing stone where a culvert is being replaced 700 meters (0.43 miles) north of the Mary Mountain trailhead.

Just south of LeHardy Rapids, a portion of an historic dry-laid retaining wall on the fill-side of the road, between the road and the Yellowstone River, needs repairing and will be reconstructed.

Two eroding and unstable slopes above the road in the area of the Brink of the Upper Falls intersection will be stabilized with the use of geo-textile reinforcing material, drainpipe, and rock and embankment material. A layer of topsoil will cover the slope, and allow for revegetation with native plants.

Fifty existing paved pullouts will be retained and improved at key wildlife and scenic viewing areas, fishing access points, and other areas of interest. Eleven informal pullouts will be redesigned and paved. Three new pullouts will be constructed.

A repair to a hole in the parking area at Mud Volcano will be completed by replacing the existing broken drainpipe, filling the hole with quartzite stone, and re-paving and installing a grate to allow steam to vent.

A hole in the parking area located towards the south end of the Sulphur Caldron parking area will not be repaired as part of this project. This parking area will have an asphalt overlay constructed over the existing pavement. Additionally, a log rail will be constructed between the northbound travel lane and the pedestrian walkway overlooking the Sulphur Caldron. Curb cuts for wheelchair access to the pedestrian area will be provided from the parking area.

At Grizzly overlook, a log curb will be installed for separating the vehicle and pedestrian areas. Wheelchair access will also be provided to the viewing area. The parking area will be overlaid with new asphalt.

The road intersection of the Grand Loop Road at Canyon will be reconfigured with a new striping design on the existing paved and disturbed area.

Staging and stockpiling areas will occur at pullouts within the project area, Sylvan Pass, and the Canyon incinerator site. The asphalt hot-mix batch plant will be located either at Sylvan Pass or the Grebe Lake pit. Waste material from the project will be disposed of at the Canyon ballfield disposal site and/or the Lake Transfer Station disposal site.

Implementation of the project will improve safety to the traveling public and park personnel due to improvements in the pavement surface, and correction of damage from frost heaving.

The project would result in a disturbance of 0.75 to 1.25 acres beyond the existing road prism (ditch to ditch). No impact to wetlands is anticipated.

Construction of this road project is planned to begin in the fall of 2002. It is anticipated that the project would be completed concurrently with the proposed first phase of reconstruction of the Dunraven Road (Canyon Jct. to Tower Jct.) (by 2005).

ALTERNATIVES CONSIDERED

The environmental assessment analyzed two alternatives, the preferred alternative described above and a no-action alternative. Under the no-action alternative, pothole filling, minor patching, and sealing and striping would occur. However, the road would continue to deteriorate, potholes would continue to be numerous, and problem areas for frost heaving would not be addressed.

The environmental assessment also examined several alternatives for material sources during the planning process, which are described below.

- Sources outside the park, at distances of about 140 kilometers (87 miles) from the project site, were considered impractical because of long haul distances, travel time, increased traffic congestion, road deterioration, potential for accidents, possible exhaustion of these material sources, and high transportation costs.
- A number of alternative material sources were considered. Several in-park sources identified in the *Parkwide Road Improvement Plan* were sampled and tested by the FHWA. All sources failed to meet one or more of the following criteria: material quality, based on current federal specification; minimal geothermal effects; and area of potential disturbance less than area of reclamation.

Each of the above alternatives was dismissed from further consideration because they either unsatisfactorily addressed project objectives.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed NEPA's Section 101:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;

- Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Given the above criteria, Alternative A was determined to suitably fit the balance that is required to be met as the environmentally preferred alternative. Alternative A best preserves and enhances cultural and natural resources over the long-term. Re-paving the road at the existing width, with additional pullouts also formalized, best meets the national environmental policy expressed in NEPA (Sec. 101(b)) to fulfill the responsibilities of each generation as trustee of the environment for succeeding generation.

Alternative B, the No Action Alternative, would not strike the balance between public safety and preservation and repair of features.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

Impacts that may be both beneficial and adverse: Approximately 0.3 to 0.5 hectares (0.75 to 1.25 acres) of new disturbance would occur. This disturbance would impact adjacent stands of mature lodgepole forest, and open meadows. No wetland impacts would occur. Air quality would be degraded in the short-term due to dust and exhaust caused by construction equipment. Safety of visitors and construction employees would be improved by reducing the number of existing potholes and improvements to the road surface.

Degree of effect on public health or safety: A decrease in vehicle accidents may be achieved by reducing the number of vehicles dodging potholes on park roads.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: As described in the environmental assessment, prime farmlands, wetlands, wild and scenic rivers, and ecologically critical areas will not be affected.

Degree to which effects on the quality of the human environment are likely to be highly controversial: There were no highly controversial effects identified during either preparation of the environmental assessment or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There were no highly uncertain, unique or unknown risks identified during either preparation of the environmental assessment or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The preferred

alternative neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Impacts of the preferred alternative identified in the environmental assessment would be mitigated by those items listed in the environmental assessment. With the mitigation measures implemented there would be no new cumulative impacts to unique or important features or resources within the park.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: As described in the environmental assessment, an intensive archeological inventory in the area was conducted 100 meters (328 feet) on each side of the roadway. Areas with lithic or historic ground scatter were shovel tested to ascertain the presence, or absence, of buried cultural material. No National Register-eligible sites along this road segment would be adversely affected. Thermal waters associated with the Dragons Mouth-Mud Volcano area have been identified as having connections with a Kiowa Tribe creation Myth. This project would not impact the thermal areas of concern. No other known ethnographic resources that have been identified in the area, and tribal consultation held in 1999, 2000 and 2001 did not reveal any.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: With the implementation of the mitigation measures listed above the Fish and Wildlife Service has concurred that the project would not likely adversely affect threatened or endangered species.

Whether the action threatens a violation of federal, state, or local environmental protection law: The preferred alternative violates no federal, state, or local environmental protection laws.

In addition to reviewing the list of significance criteria, Yellowstone National Park determined that implementation of the preferred alternative will not constitute an impairment of the park's resources and values. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, the agency and public comments received, and the professional judgement of the decision-maker in accordance with the National Park Service's Management Policies, 2001 (December 27, 2000). As described in the environmental assessment, implementation of the preferred alternative will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Yellowstone National Park; (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

PUBLIC INVOLVEMENT

The completed environmental assessment was made available for public comment during a 30-day period ending November 16, 2001. During that period and the five business days following, 5 responses were received from various agencies and one individual; the Wyoming State Historic

Preservation Office, the Fish and Wildlife Service, the Shoshone-Bannock Heritage Tribal Office of the Fort Hall Reservation, and the Park County Wyoming Board of Commissioners. The EA or notification of EA availability was sent out to approximately 240 addresses (other than NPS staff). A press release was also issued on the availability of the EA on October 17, 2001. A summary of comments for this EA is attached.

No new major issues were raised by the public comments that were not addressed in the EA.

CONCLUSION

The National Park Service proposes to resurface, restore, and rehabilitate, 25.3 kilometers 15.7 miles of road on the existing alignment to the same 7.4 meter (24-foot) width. Depending on funding, the work would begin as early as November 2002.

The proposed rehabilitation of the Canyon Junction to Fishing Bridge Junction Road is not a major federal action that normally requires the preparation of an Environmental Impact Statement (EIS). Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental law.

There are no federally listed or candidate plant species that occur in the park. Approximately 0.3 to 0.5 hectare (0.75 to 1.25 acre) of new disturbance to soils and vegetation beyond the existing road prism (ditch to ditch) would occur.

There would be no effect on hydrothermal resources. No wetlands/shorelines would be impacted. Wildlife would be temporarily displaced by construction activities. No significant increases in wildlife mortality are anticipated. There would be no effect on whooping cranes, bald eagles, or gray wolves. This alternative is not likely to adversely affect the continued existence of the grizzly bear or Canada lynx populations. Effects on air quality would be temporary in nature and minimized through adherence to all applicable regulations. Significant archeological and ethnographic resources would not be adversely affected, no adverse effects would occur to historic resources. Significant cultural resources have been documented, and would be protected and preserved. There would be no adverse impact on public health and public safety would be improved.

Based on the foregoing, it has been determined that since the project does not constitute a major federal action significantly affecting the quality of the human environment, an EIS will not be prepared.

SUMMARY OF COMMENTS

Canyon Junction to Fishing Bridge Junction (Hayden Valley Road) Environmental Assessment

A total of five responses on the Canyon Junction to Fishing Bridge Junction (Hayden Valley Road) Environmental Assessment were received during or within five business days after the 30-day public review period, October 17, through November 16, 2001. All of the comments received were from consultative and regulatory agencies, and one from an individual.

COMMENT (Fish and Wildlife Service):

Based on the information provided, we concur that the proposed project is likely to have no effect on the Canada lynx, Bald eagle, Whooping crane, or Gray wolf. However, given that the Environmental Assessment states "it is expected that this overlay project would cause a short-term displacement of some bears from near the road during construction," we cannot concur with a "no effect" for the Grizzly bear. Because of the stated mitigation measures (e.g., bear education for construction workers, special care with waste removal, etc.) we can concur with a not likely to adversely affect for the Grizzly bear.

REPLY:

No reply

COMMENT (Wyoming State Historic Preservation Office, WYSHPO):

The State Historic Preservation Office concurred with the Park's assessment of "no historic properties adversely affected".

REPLY:

No reply

COMMENT (The Shoshone-Bannock Heritage Tribal Office of the Fort Hall Reservation): What plans are incorporated in the project contract to avoid, mitigate or deter from cultural resources? Should inadvertent discovery subsurface; we recommend that a "stop work" procedure be put into effect and contact appropriate agencies.

REPLY:

The construction contract will have a "stop work" clause written into it, and appropriate agencies will be contacted and consulted. The road corridor was surveyed for potential historic and prehistoric sites to a distance of 100 meters (328 feet) on each side of the roadway. In areas of excavation where the road bisects National Register-eligible sites, the work will be monitored.

COMMENT (Board of County Commissioners, Park County, Wyoming):

The Board of County commissioners of Park County, Wyoming hereby supports and agrees with the proposed project. We sincerely hope that the necessary funds will be made available to complete the project in a timely manner so that visitors to our community can continue their enjoyment of Yellowstone National Park on a safe and well maintained transportation system.

REPLY: *No reply.*

COMMENT (Individual, Donna Deutsch, Helena, Montana):

I realize that the Park has limited funding available for road maintenance and there is currently a backlog of projects that need attention. There is no doubt that this section of road needs major work, but I believe in fixing it right the first time. I can't see spending the money just to make a temporary repair and then to reconstruct it 15 years from now. It would be a great waste of money. I thought that the President has seen fit to appropriate more money to fix our ailing National Park infrastructure. Surely there must be more funds available to complete this project the way it should be done. If this project needs more funding, maybe some of the other less needy road projects could be put on hold. 15 years from now, it will cost at least twice as much as it does today if not more. Please make the logical, most economical choice and construct it as a 4R project.

REPLY:

The park is currently working towards upgrading its major roads within the park. An environmental assessment (Parkwide Road Improvement Plan) was prepared in 1992 and distributed for public comment that included project proposals. A schedule of proposed projects was formulated that included a mix of rehabilitation projects (3R) and reconstruction projects (4R). This schedule was formulated with many factors in mind, including cost, road closures, visitor access, condition of roads, and resource concerns. The mix is intended to balance higher cost major reconstruction projects that result in long-term improvements with lower cost rehabilitation projects like this one.

ERRATA SHEET

Page 55, Paragraph 1

With measures designed and instituted to minimize impacts on grizzly bears in the project area, construction activities would have a determination of "no effect" to the existence of the grizzly bear population in the Yellowstone ecosystem.

Replace with:

With measures designed and instituted to minimize impacts on grizzly bears in the project area, construction activities would have a determination of "may affect, not likely to adversely affect" to the existence of the grizzly bear population in the Yellowstone ecosystem.